

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/528,581	03/20/2000	MITSUAKI TERADAIRA	P4985A	4940
20178	7590 09/26/2003			
EPSON RESEARCH AND DEVELOPMENT INC			EXAMINER	
150 RIVER O	TUAL PROPERTY DEPT OAKS PARKWAY, SUITE 225		TRAN, DOUGLAS Q	
SAN JOSE, CA 95134			ART UNIT	PAPER NUMBER
			2624	()
•			DATE MAILED: 09/26/2003	O

Please find below and/or attached an Office communication concerning this application or proceeding.



	Application No.	Applicant(s)				
	09/528,581	TERADAIRA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Douglas Q. Tran	2624				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the d	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	<u> </u>					
2a)☐ This action is FINAL . 2b)⊠ Thi	is action is non-final.					
3) Since this application is in condition for allowa closed in accordance with the practice under a Disposition of Claims	ince except for formal matters, p Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the merits is 453 O.G. 213.				
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-27</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10) ☐ The drawing(s) filed on is/are: a) ☐ accep	•					
Applicant may not request that any objection to the	- · · ·	` '				
11) The proposed drawing correction filed on		DVEC by the Examiner.				
If approved, corrected drawings are required in rep 12) The oath or declaration is objected to by the Exa	•					
Priority under 35 U.S.C. §§ 119 and 120	arminer.					
	poloniku undan 25 H O O C 440/a	A) (d) == (0)				
13) Acknowledgment is made of a claim for foreigna) All b) Some * c) None of:	priority under 35 U.S.C. § 119(8	a)-(a) or (t).				
1. ☐ Certified copies of the priority documents	s have been received					
		ion No				
_ , , , , , , , , , , , , , , , , , , ,						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14)☐ Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e) (to a provisional application).				
a) ☐ The translation of the foreign language pro- 15)☐ Acknowledgment is made of a claim for domestic						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.	5) Notice of Informal I	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 2624

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-4, 8-17, 19-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Akiyama et al. (US Patent No. 5,594,653).

As to claim 1, Akiyama teaches a printer adapted to be connected to a host device and to receive a data stream from the host, the printing apparatus comprising:

a receiver (i.e., receiving means 62 in fig. 5) for receiving the data stream including a first command type (i.e., print data) and a second command type (i.e., command data) to control the printing apparatus (col. 7, line 66 to col. 8, line 1);

a first processing section (i.e., command interpreter 66 in fig. 5) responsive to commands of the first command type for executing a first process in accordance with any command of the

Art Unit: 2624

first command type included in the data stream (col. 8, lines 29-33: the data codes from the print data is processed for printing);

a second processing section (i.e., control means 68 in fig. 5) responsive to commands of the second command type for executing a second process in accordance with any command of the second command type included in the data stream, the second processing section executing the second process in preference to the first processing section performing the first process (col. 8, lines 26-28: the command data is applied to the print data and controls the printing apparatus by control means 68);

an indication device (i.e., table 2 and 3 in col. 10 or "col. 9, lines 42-45") indicating either an enabled or disabled state (the tables 2 and 3 indicating the states of enabled or disabled), and

setting means for setting the state indicated by the indication device (col. 10, lines 26-27 and 41-42: the states of enabled or disabled is set to 0 or 1),

wherein the second processing section is responsive to the indication device to perform the second process only if the indication device indicates the enabled state (col. 9, lines 47-50: the control means 68 monitors the information from RAM 53 "col. 9, lines 42-45" and determines to stop or perform the printing apparatus based on the states of the printing apparatus such as off line or on line).

As to claim 2, Akiyama discloses every feature discussed in claim 1, and Akiyama further teaches that the setting means comprises command detection means for detecting a predetermined command (i.e., real time command) in the data stream received by the receiver

Art Unit: 2624

(the real time command includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27).

As to claim 3, Akiyama discloses every feature discussed in claim 2, and Akiyama further teaches that the indication device comprises a flag memory (col. 11, line 62) and the predetermined command includes a disabling command (i.e., cancel command in table 1 from col. 12), the setting means being responsive to the disabling command for setting a flag in the flag memory to the disabled state (col. 9, lines 26-30).

As to claim 4, Akiyama discloses every feature discussed in claim 3, and Akiyama further teaches the indication device comprises a flag memory and the predetermined command includes an enabling command, the setting means being responsive to the enabling command for setting a flag in the flag memory to the enabled state (col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

As to claim 8, Akiyama discloses every feature discussed in claim 2, and Akiyama further teaches the indication device comprises a flag memory (col. 11, lines 34-37) and the predetermined command includes an enabling /disabling command, the setting means being responsive to the enabling/disenabling command for setting one or more flags in the flag memory to the first/second state, the enabling/disabling command having at least two parameters, one parameter designating one or more commands of the second command type and another parameter for setting for each designated command a respective flag in the flag memory to the enabled or the disabled state (col. 11, lines 34-37).

As to claims 9 and 10, Akiyama discloses every feature discussed in claim 2, and further teaches the predetermined command is of the first command type comprising parameter in the

Art Unit: 2624

form of a stream of non-coded data (i.e., print data) and the setting means is responsive to the command detection means detecting the predetermined command for setting the state of the indication device to the disabled state or enabled state (for cancel command in col. 10, line 38-39).

As to claim 11, Akiyama discloses every feature discussed in claim 10, and further teaches a status information memory for storing status information indicative of reception of the predetermined command, and status information sending means, wherein the command detection means is adapted to detecting a second predetermined command in the data stream received by the receiver, the status information sending means being responsive to the command detection means detecting the second predetermined command for sending the status information to the host (col. 10, lines 32-36).

As to claim 12, Akiyama discloses every feature discussed in claim 11, and further teaches at least the first and the second processing sections and the setting means are implement by a program-controlled microprocessor (col. 10, lines 8-10).

As to claim 13, Akiyama discloses a method of controlling a printer connected to a host device comprising the steps of:

- (a) receiving a data stream from the host device, the data stream including commands of a first command type (i.e., print data) and a second command type (i.e., command data) to control the printing apparatus (col. 7, line 66 to col. 8, line 1);
- (b) detecting a predetermined command (i.e., real time command) among in the data stream received in step (a) and disabling or enabling execution of one or more commands of the second command type in response to the predetermined command (the real time command

Art Unit: 2624

includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27 and col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

- (c) carrying out a first process in response to a command of the first command type received in step (a) (col. 8, lines 29-33: the data codes from the print data is processed for printing);
- (d) carrying out a second process in response to a command of the second command type received in step (a), in preference to the step (c), when execution of the command of the second command type is enabled in step (b) (col. 8, lines 26-28: the command data is applied to the print data and controls the printing apparatus by control means 68).

As to claims 14 and 15, Akiyama teaches step (b) comprises disabling or enabling execution of commands of the second command type in response to the predetermined command (the real time command includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27 and col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

As to claims 16-20, Akiyama discloses the method for performing the claims 9-12 as indicated above.

As to claim 21, Akiyama teaches a method of controlling an information-processing device for sending a data stream of commands to a printer so as to control the printer, the method comprising the steps of

(a) sending a command of a first command type (i.e., print data) to the printer, in response to a request from the host device (col. 7, line 66 to col. 8, line 1), and

Application/Control Number: 09/528,581 Page 7

Art Unit: 2624

(b) sending a command of a second command type (i.e., command data) different from the first command type to the printer, when the command of the first command type is a first predetermined command for transmitting image data to the printer (col. 7, line 66 to col. 8, line 1),

- (c) sending a second predetermined command (i.e., real time command) to the printer so as to disable execution of a command sent in step (b) (i.e., the real time command includes cancel command from the host via the receiving means 62 in fig. 5 "col. 9), and
- (d) sending the first predetermined command (col. 15, lines 56-60 indicates that the print data or other data in the first predetermined command is received by the printer).

As to claims 22-25, Akiyama teaches the method for performing claims 9-12 as indicated above.

As to claim 26, Akiyama teaches the program for instructing the claim 21 as indicated above.

As to claim 27, Akiyama teaches the program from the storage medium for performing a method in claim 20 as indicated above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2624

5. Claims 5-7, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al. (US Patent No. 6,453,208 B2) and Miyasaka et al. (US Patent No. 6,453,208).

As to claim 5, Akiyama discloses every feature discussed in claim 3.

However, Akiyama does not teach a counter for counting an elapsed time from the moment the receiver receives the predetermined command, wherein the setting means is responsive to the counter for setting the state indicated by the indication device to the enabled state when the elapsed time exceeds a predetermined time.

Miyasaka teaches a counter for counting an elapsed time from the moment the receiver receives the predetermined command, wherein the setting means is responsive to the counter for setting the state indicated by the indication device to the enabled state when the elapsed time exceeds a predetermined time. (see step 406 in fig. 17 and col. 22, lines 15-18 and col. 23, lines 10-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the printing system of Akiyama for counting an elapsed time from the moment the receiver receives the real time command and the enable state is set when elapsed time exceeds a predetermined time as taught by Miyasaka. The suggestion for modifying the system of Akiyama can be reasoned by one of ordinary skill in the art as set forth above by Miyasaka because the modified print system would increase the efficiency for controlling the printer.

As to claim 6, Miyasaka disclose every feature discussed in claim 3, and Miyasaka further teaches a counter for counting a length of a data stream (i.e., the size of received data defined as one byte) received by the receiver from the moment the receiver receives the

Art Unit: 2624

predetermined command, wherein the setting means is responsive to the counter for setting the state indicated device to the enabled state when the counter has counted a predetermined length (col. 22, lines 10-18 and col. 23, lines 10-18).

As to claim 7, Miyasaka discloses every feature discussed in claim 6, and Miyasaka further teaches the disabling command comprises a parameter designating the predetermined length (note any command from the received data includes the disabling command having the predetermined length, col. 22, lines 10-18).

As to claim 18, the combination Akiyama and Miyasaka teaches the method for performing the apparatus claim 5 as indicated above.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran Sep. 19, 2003

> GABRIEL GARÇIA BRIMARY EXAMINE